

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

NETLIST, INC.,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	Civil Action No. 2:22-cv-293-JRG
	)	
SAMSUNG ELECTRONICS CO., LTD.,	)	JURY TRIAL DEMANDED
SAMSUNG ELECTRONICS AMERICA,	)	
INC., SAMSUNG SEMICONDUCTOR,	)	LEAD CASE
INC.,	)	
Defendants.	)	

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NETLIST, INC.,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	Civil Action No. 2:22-cv-294-JRG
	)	
	)	JURY TRIAL DEMANDED
MICRON TECHNOLOGY, INC.; MICRON	)	
SEMICONDUCTOR PRODUCTS, INC.;	)	
MICRON TECHNOLOGY TEXAS LLC,	)	
	)	
Defendants.	)	

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**ESI ORDER**

Before this Court is the Joint Motion for Entry of ESI Order filed by Plaintiff Netlist, Inc. (“Netlist” or “Plaintiff”) and Defendants Samsung Electronics Co., Ltd. (“SEC”), Samsung Electronics America, Inc. (“SEA”), and Samsung Semiconductor, Inc. (“SSI”) (collectively “Samsung”), and Defendants Micron Technology, Inc., Micron Semiconductor Products, Inc., and Micron Technology Texas LLC (collectively “Micron”). Having considered the parties’ motion, the Court finds that the Motion should be **Granted** and **ORDERS** as follows:

1. This Order supplements all other discovery rules and orders. It streamlines Electronically Stored Information (“ESI”) production to promote a “just, speedy, and inexpensive determination” of this action, as required by Federal Rule of Civil Procedure 1.
2. The Order may be modified in the Court’s discretion or by agreement of Netlist and Micron or Netlist and Samsung. Any dispute concerning this Order or any provision of this Order shall be submitted to the Court for resolution.
3. A party’s meaningful compliance with this Order and efforts to promote efficiency and reduce costs will be considered in cost-shifting determinations.
4. The parties shall produce metadata associated with any ESI production according to Exhibit 1 attached hereto. Nothing in this Order or the Discovery Order shall require the parties to create metadata that does not already exist in the normal course of business.
5. Absent agreement of the parties or further order of this court, the following parameters shall apply to ESI production, in addition to those in Exhibit 1 attached hereto:
  - (a) **No Backup Restoration Required.** Absent a showing of good cause, no party need restore any form of media upon which backup data is maintained in a party’s normal or allowed processes, including but not limited to backup tapes, disks, SAN, and other forms of media, to comply with its discovery obligations in the present case.
  - (b) **Voicemail and Mobile Devices.** Absent a showing of good cause, voicemails, PDAs and mobile phones are deemed not reasonably accessible and need not be collected and preserved.
6. General ESI production requests under Federal Rules of Civil Procedure 34 and 45, or compliance with a mandatory disclosure order of this Court, shall not include e-mail or

other forms of electronic correspondence (collectively “e-mail”). To obtain e-mail parties must propound specific e-mail production requests.

7. Each party shall provide a specific listing and identification<sup>1</sup> of the ten (10) most significant e-mail custodians in view of (1) the pleaded claims and defenses, (2) infringement contentions and accompanying documents pursuant to P.R. 3-1 and 3-2, (3) invalidity contentions and accompanying documents pursuant to P.R. 3-3 and 3-4, and (4) preliminary information relevant to damages. Recognizing that e-mail collection, review, processing, and production can be time consuming, and in order to avoid late e-mail requests near the close of fact discovery, the exchange of this information shall occur fourteen (14) days after this Order is entered by the Court (or the disclosures in P.R. 3-1, 3-2, 3-3, and 3-4, whichever occurs later). The other party may identify up to ten (10) additional custodians, and may inquire if the producing party has e-mail for those identified custodians (without the need to propound an interrogatory); if the producing party does not have e-mails for any such custodian, the other party may continue its inquiries until it has identified ten (10) additional custodians for whom the producing party has e-mails.
8. E-mail production requests shall identify the custodian, search terms, and time frame. The parties shall cooperate to identify the proper custodians, proper search terms, and proper time frame, and shall cooperate to ensure that requests pursuant to this Order do not seek cumulative discovery. Each party shall limit its e-mail production requests to the other party to a total of eight (8) custodians for all such requests. A party may serve e-mail production requests for custodians other than those identified pursuant to Paragraph 7, above. E-mail production requests shall be served not later than sixty-five (65) days before

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<sup>1</sup> A “specific identification” requires a short description of why the custodian is believed to be significant.

the close of fact discovery. The parties may jointly agree to modify these restrictions without the Court's leave. The Court shall consider contested requests for additional or fewer custodians per producing party, or requests for e-mails after the deadline for serving such requests, upon showing a distinct need based on the size, complexity, issues of this specific case, and the extent to which requests pursuant to this Order seek cumulative discovery, in a brief joint submission.

9. Each requesting party shall limit its e-mail production requests to a total of ten (10) terms per custodian. The parties may jointly agree to modify these limits without the Court's leave. The Court shall consider contested requests for additional or fewer search terms per custodian, upon showing a distinct need based on the size, complexity, and issues of this specific case, in a brief joint submission. The search terms shall be narrowly tailored to particular issues. Indiscriminate terms, such as the producing company's name or its product name are inappropriate unless combined with narrowing search criteria that sufficiently reduce the risk of over-production. A conjunctive combination of multiple words or phrases (e.g., "computer" and "system") narrows the search and shall count as a single search term. A disjunctive combination of multiple words or phrases (e.g., "computer" or "system") broadens the search, and thus each word or phrase shall count as a separate search term unless they are variants of the same word. Use of narrowing search criteria (e.g., "and," "but not," "w/x") is encouraged to limit the production and shall be considered when determining whether to shift costs for disproportionate discovery. The Parties shall ensure that, prior to applying search terms, emails have been processed so as to preserve non-Western (e.g., Korean) characters, and to fully enable searching using Unicode non-Western (e.g., Korean) search terms. A search term proposed using both

Western and Unicode non-Western (e.g., Korean) characters shall count as a single search term.

10. Within five (5) business days of receipt of e-mail production requests, the producing party shall either: (a) indicate an objection to the e-mail production request on a basis other than search term hit counts (e.g., improper custodian or improper search terms), or (b) diligently work to obtain search term hit counts based on the e-mail production requests.<sup>2</sup> Within five (5) business days of receipt of search term hit counts (or the making of an objection by the producing party), the parties shall diligently meet and confer regarding the e-mail production requests, including the issues set forth in Paragraphs 8 and 9. The parties shall continue to meet and confer as needed. As part of the continuing meet and confer process, the producing party shall, as soon as practicable, run the requested search terms for each custodian and provide the requesting party with document hit counts for the requested search terms plus family members. The parties agree to revise search terms using limiters or other appropriate means until the document hit counts (including family members) are within a reasonable range on a custodian-by-custodian basis. A document hit count (including family members) of 4,000 per custodian is presumptively reasonable. The parties shall submit any disputes that may arise under this Paragraph to the Court for resolution in a brief joint submission.
11. The mere production of ESI in a litigation as part of a mass production shall not itself constitute a waiver for any purpose.

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<sup>2</sup> Depending on the circumstances (e.g., where the e-mails are stored, the time for decryption, etc.), obtaining search term hit counts may be time consuming. The parties agree to keep one another apprised of estimated times for receiving hit counts after receiving an e-mail production request.

12. This Order does not govern the format for production of source code, which shall be produced pursuant to the relevant provision of the Protective Order.
13. Except as expressly stated, nothing in this Order affects the parties' discovery obligations under the Federal or Local Rules.

**Exhibit 1 to ESI Order**  
*Netlist v. Samsung, Micron*, No. 22-cv-293/294 (E.D. Tex.)

**STIPULATION REGARDING  
THE FORM OF DOCUMENT PRODUCTION**

**A. Form of Productions From Other Actions**

This stipulation governs the form of production of documents in this action, but does not govern the form of production of documents that were produced in any prior action that are re-produced (with original Bates numbers intact, regardless of whether a party also applies additional Bates numbers) in this action, provided that such documents are produced in accordance with the form of production governing the prior action (except that to the extent a party designates a document pursuant to the protective order in this action, it shall designate such document as being subject to the protective order in this action, e.g., through reference to the case number).<sup>3</sup> Nothing in this stipulation alters or supersedes any protective order in place in any other action.

**B. Electronically Stored Information (“ESI”).**

ESI shall be provided in the following format:

1. Images. Single-page 300 dpi CCITT Group IV black and white TIFFs shall be provided. Notwithstanding the foregoing, for the following documents, color images shall be provided: PowerPoint or similar presentation files; Portable Document Format (PDF) documents, unless color is not significantly present in the original file. The parties shall accommodate reasonable requests for production of specific images in color where color would meaningfully improve the legibility of the document. Color images shall be provided as 72 dpi JPGs.
2. Database Load Files/Cross-Reference Files. Documents shall be provided with the following information, correlated to the beginning Bates number of each corresponding document: (1) a Concordance delimited load file(s) containing the metadata described herein; and (2) an Opticon delimited cross-reference file(s) showing document breaks.

Example of Concordance Delimited File:

þBegDocþþEndDocþþBegAttachþþEndAttachþ

Example of Opticon Delimited File:

MSC000001, MSC001, D:\IMAGES\001\MSC000001.TIF, Y,,,3  
MSC000002, MSC001, D:\IMAGES\001\MSC000002.TIF,,,,

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<sup>3</sup> The requirement to designate confidential documents as being subject to the protective order in this action, e.g., through reference to the case number, does not apply to documents that the parties have already produced. The parties reserve the right to request that costs relating to this requirement be shifted to the requesting party.

MSC000003, MSC001, D:\IMAGES\001\MSC000003.TIF,,,  
MSC000004, MSC001, D:\IMAGES\001\MSC000004.TIF, Y,,, 2  
MSC000005, MSC001, D:\IMAGES\001\MSC000005.TIF,,,

3. Unique IDs. Each image shall have a unique file name which shall be the Bates number of that page (e.g., BATES000001.TIFF). The Bates number must appear on the face of the image (e.g., BATES000001).
4. Text Files. For each document, a document-level text file named for the beginning Bates number of its corresponding document (e.g., BATES000001.TXT) shall be provided. The text of non-redacted ESI shall be extracted directly from the native file. OCR text files shall be provided for redacted documents. Unless the ESI is of a type not amenable to OCR, e.g., media files, OCR text files shall be provided for documents that do not contain extractable text in the native file.
5. Unique Documents. The parties shall attempt to de-duplicate ESI to avoid substantially duplicative productions. No party shall remove any attachment to any email, regardless of whether the attachment is duplicative of any other document. The parties may de-duplicate emails that are identical. Custodian metadata for a given document shall reflect any Custodian of any document removed as a duplicate of that document.
6. Metadata Fields. The following metadata shall be provided within the Concordance delimited file described above to the extent reasonably accessible and not subject to a justified and proper claim of privilege:

For all documents:

Md5Hash  
Time Zone  
Confidentiality (designation under Protective Order)  
Custodian(s)<sup>4</sup>

Additionally, for emails:

To  
From  
CC  
BCC  
Date Sent  
Time Sent  
Subject  
ProdBegAttach

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<sup>4</sup> Custodian metadata shall in good faith identify from whom or where each document was collected for production in this action, e.g., an individual, a document repository, or a third party, except where this information is not readily ascertainable from the manner in which the documents are collected (e.g., documents retained from prior litigations without such metadata).



ProdEndAttach

Additionally, for non-email documents:

Filename  
File Extension  
Last Modified Date  
Author  
Last Author

7. Additional Metadata. Should additional metadata (such as the original filepath of documents) be reasonably accessible that if provided would significantly aid a receiving party in understanding or using the documents, if requested, the producing party shall not unreasonably withhold such metadata.
8. Native Form. The following documents shall be produced in native form: files not readily converted to images, such as media files; standalone database files such as Microsoft Excel or Access files; CAD or similar engineering drawings or schematics; source code or other software; complete, functional copies of websites. The parties shall not unreasonably refuse a request for the production of specific documents in native form; however, categorical requests for production of documents other than those identified above in native form are discouraged.
9. Other Databases. Extracts from non-standalone databases, e.g., financial databases, shall be produced natively, as a text delimited file, or where possible as Microsoft Excel or Access files.
10. TIFF Placeholder. Where documents produced natively are displaced from the production TIFF images of the documents with which they are kept in the ordinary course of business, the parties shall produce a Bates-numbered TIFF placeholder image, and associate the displaced native document with that Bates number.

**C. Hard-Copy Documents.**

Hard-copy documents shall be provided in the following format:

1. Images. Single page 300dpi CCITT Group IV black and white TIFFs shall be provided. The parties shall accommodate reasonable requests for production of specific images in color. Color images shall be provided as 72 dpi JPGs.
2. Database Load Files/Cross-Reference Files. Documents shall be provided with (1) a Concordance delimited load file(s) and (2) an Opticon delimited cross-reference file(s) showing document breaks.

Example of Concordance Delimited File :

þBegDocþþEndDocþþBegAttachþþEndAttachþ

Example of Opticon Delimited File:

MSC000001,MSC001,D:\IMAGES\001\MSC000001.TIF,Y,,,3  
MSC000002,MSC001,D:\IMAGES\001\MSC000002.TIF,,,,  
MSC000003,MSC001,D:\IMAGES\001\MSC000003.TIF,,,,  
MSC000004,MSC001,D:\IMAGES\001\MSC000004.TIF,Y,,,2  
MSC000005,MSC001,D:\IMAGES\001\MSC000005.TIF,,,,

3. Unique IDs. Each image shall have a unique file name which shall be the Bates number of that page (e.g., BATES000001.TIFF). The Bates number must appear on the face of the image (e.g., BATES000001).
  4. OCR. For each document, a document-level text file shall be provided. Each text file shall be named for the beginning Bates number of its corresponding document (e.g., BATES000001.TXT).
  5. Unitizing of Documents. When scanning paper documents, the parties shall undertake reasonable efforts to ensure that distinct documents are not merged into a single record, and single documents are not split into multiple records (*i.e.*, the parties shall attempt to logically unitize scanned hard copy documents).
  6. Objective Coding Fields. The following objective coding fields shall be provided to the extent reasonably available: (i) Beginning Bates Number; (ii) Ending Bates Number; (iii) Beginning Attachment Bates Number; (iv) Ending Attachment Bates Number; and (v) Custodian.<sup>5</sup>
- D. **Production Media.** Documents shall be produced on physical electronic media or via FTP or similar electronic file transfer. Each production shall be identified by a production volume number.
- E. **Objective Coding/Metadata Format.**

The objective coding and/or ESI metadata, including extracted text, shall be provided in the following format:

- a) fields shall be delimited by the default Concordance field delimiter for ANSI character 20 (¶)
- b) String values within the fields file shall be enclosed with a text delimiter (b)
- c) The first line shall contain objective coding and/or ESI metadata headers and below the first line there shall be exactly one line for each document
- d) Each row of objective coding and/or ESI metadata must contain the same amount of fields as the header row
- e) Multi-values shall be separated by a semicolon (;)
- f) All files containing non-Western characters shall be provided in Unicode-compliant form.

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<sup>5</sup> See n.4.

**F. Parties to Confer in Good Faith.**

The parties agree to confer in good faith about disputes regarding the form of document production, including to resolve issues not addressed by this stipulation.